

## BANK SELF-REGULATION: COMMENT ON BORDO AND SCHWARTZ

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Can banking systems regulate themselves? Hardly anyone thought so a decade ago. Since then numerous writings (see Selgin and White 1994) have defended the opposite view. Critical responses to these writings serve an important purpose, by spelling out the precise nature of supposed market failures in money and banking—failures that are often simply taken for granted.

The Bordo-Schwartz critique of bank self-regulation focuses on three propositions offered in support of monetary *laissez faire*. These are:

1. That interbank clearings are capable of preventing the overissuance of bank money (notes or deposits) both by individual banks and by the banking system as a whole;
2. That competing, private issuers of paper currency will deliberately aim to stabilize the purchasing power of their monies; and
3. That the quantity of money will automatically be limited if banks restrict themselves to discounting “real bills.”

Bordo and Schwartz argue that all three propositions are false, and that the possibility of bank self-regulation is therefore “doubtful.”

### Visions of Monetary *Laissez Faire*

It is important to recognize that each of the three propositions listed above is linked to a distinct theory or “vision” of monetary self-regulation. The propositions are thus independent from if not at odds with one another. Proposition (1), concerning the clearing mechanism, is appealed to by proponents, including White (1984) and myself (1988), of “free banking,” where commercial banks freed from government regulations are still assumed to redeem their notes and deposits

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in some base money produced outside the banking system. Proposition (2), in contrast, is mainly appealed to by proponents of competing, private fiat-type monies, including Klein (1974), and Hayek (1978). Proposition (3), finally, is potentially applicable to any sort of banking system, whether free or centralized. It is associated with only one important, recent theoretical paper, written by Thomas Sargent and Neil Wallace (1982).

It follows that no single proponent of monetary self-regulation should be expected to subscribe to, much less defend, all three propositions. However, as I point out later, Bordo and Schwartz take for granted that any argument for monetary self-regulation, including arguments for free banking, must rest on all three of the above propositions. They therefore mistakenly assume that theory and empirical evidence that contradicts the second and third propositions also undermines the case for free banking. That simply is not so: the modern case for free banking rests in part (though not entirely) on proposition (1) above, and not at all on propositions (2) or (3). In fact, in my own writings (Selgin 1989; Selgin and White 1994: 1734–36) I explicitly deny the validity of the latter propositions.

### Self-Regulation through the Clearing Mechanism

The free-banking vision of monetary *laissez faire* is one in which competing banks, free from all government regulations other than ones governing the mass of business contracts, offer deposits ( $D$ ) and banknotes ( $N$ ) that are redeemable in some base money produced outside the private banking system. The quantity of money supplied by such a system depends on (1) the stock of base money ( $B$ ), all of which is assumed to be kept in the form of bank reserves ( $R$ ), and on (2) the banking-system reserve ratio ( $r$ ), where  $D + N = B(1/r)$ . This value will, of course, be well defined only in so far as both  $B$  and  $1/r$  (the free-banking money multiplier) have well-defined values.

All modern discussions of free banking acknowledge a need for institutional arrangements capable of restricting the stock of base money. Some take for granted a commodity (e.g., gold) standard, where base money is subject to increasing average real production costs. Others (e.g., Selgin 1988: chap. 11; Selgin 1994b) allow for a fiat standard subject to a strict quantity rule, such as a frozen monetary base. Given some such arrangement for limiting base growth, asking whether a free banking system can effectively restrain the growth of any monetary aggregate is equivalent to asking whether the free-banking money multiplier is determinate. Affirmative answers to this

question point to the bank money clearing mechanism as a multiplier-constraining device.

In response Bordo and Schwartz argue that, although the clearing mechanism is capable of preventing individual banks from issuing too many notes or deposits relative to other banks in the system, the same mechanism cannot prevent a *concerted* overexpansion: if all banks in a system expand in unison, none suffers any net reserve loss. The money multiplier will therefore be indeterminate.

This is a venerable argument against unregulated banking, whose past proponents include both John Maynard Keynes and Chicago economist Lloyd Mints. Nevertheless the argument is theoretically suspect, because it ignores the role bank reserves play in protecting banks against random reserve losses. As long as interbank transactions involve a random element, then (assuming positive costs of liquidating non-reserve assets on short notice) any individual bank will want to hold some reserves to guard against the positive probability of suffering an adverse clearing in any single clearing session. Even if net clearings are expected to zero-out eventually for all banks, a bank starting out with zero reserves would face 50:50 odds of being in default after a single clearing session. To reduce these odds to something more reasonable, the bank will want to hold precautionary reserves. The more reserves it starts with, the lower its risk of running short.

More crucially, the greater the volume of clearings, as given by the total stock of bank money times its velocity of circulation, the greater will be the reserve ratio needed by an individual bank to achieve any given level of protection from default.<sup>1</sup> Assuming, then, that a group of banks starts out with some "optimal" level of protection and that the stock of bank reserves is given, any in-concert expansion will prove unsustainable, because it will involve a reduction in bank reserve ratios below their optimal level.

Bordo and Schwartz acknowledge this argument,<sup>2</sup> but dismiss it as a "rudimentary" concoction of one or two proponents of free banking. In fact the argument is simply an application of the standard (and, as far as I am aware, still unsurpassed) microeconomic theory of bank precautionary reserve demand, which is itself merely a version of the received theory of precautionary money holding. Bordo and Schwartz

<sup>1</sup>The argument therefore does not assume that the free-banking reserve ratio is fixed, as Bordo and Schwartz claim.

<sup>2</sup>At one point, however, they assert that free-banking theorists have not "understood that a clearinghouse provides no check if all banks expand simultaneously," wrongly implying that we have not been aware of the in-concert overexpansion argument.

are therefore unjustified in rejecting the argument out of hand, without presenting any counterargument save for the claim that I personally have not employed the argument consistently.<sup>3</sup>

## Historical Evidence

Instead of attempting to answer the theoretical argument for the clearing mechanism as a mechanism for bank self-regulation, Bordo and Schwartz review some historical evidence bearing on the subject. The main episodes they consider are (1) Scottish banking before 1844; (2) the New England Suffolk System; (3) the Second Bank of the United States; and (4) Canadian banking before 1914. They claim that the evidence on the whole contradicts claims concerning the effectiveness of the clearing mechanism in restraining aggregate bank expansion.

Just how damaging is this “negative” evidence to the case for free banking? The most damaging evidence would appear to be that for the Second Bank of the United States. It is generally agreed that the Second Bank led a systemwide overexpansion of currency from 1828 to 1831. What is controversial is Bordo and Schwartz’s claim that this episode illustrates the consequences of free banking. Indeed, many writers regard the Second Bank of the United States as an early central bank. While this may be stretching the point, the fact remains that the Second Bank enjoyed many special privileges, including the ability to branch nationwide, and that these privileges together with political incentives faced by the Second Bank caused a breakdown of the bank-money clearing mechanism. Instead of redeeming notes issued by the Second Bank, state banks held and reissued them. The Second Bank, in turn, often refrained from redeeming notes issued by state banks, believing that such a policy would help it to secure political support needed for a renewal of its charter. Such a “live and let live” arrangement was a far cry from what took place in other, less hierarchical banking systems, where special privileges and politics did not undermine banks’ normal incentives to compete aggressively with one

<sup>3</sup>The reference is to my discussion (1988: 150–51) of overexpansion in the post-WWI Australian monetary system. In fact, I am not inconsistent. The Australian system in question operated within the confines of an international gold standard. In it, a general overexpansion of bank money (relative to the rest of the world as well as to the domestic demand for real money balances) could occur as a result of capital inflows or domestic gold production, both of which would inflate Australian bank reserves. This sort of overexpansion does not involve any weakening of bank reserve ratios or extension of the bank-money multiplier, and so would not be constrained by the clearing mechanism. Instead, international equilibrium would evolve by way of the price-specie-flow mechanism, involving a net transfer of gold from Australia to other gold-standard nations.

another. It is to such arrangements, and not to the United States prior to 1837, that one must look for evidence for or against bank self-regulation.

One such arrangement, the New England Suffolk system, was hierarchical in that its clearinghouse was organized and operated by the Suffolk Bank of Boston. But it was not hierarchical to the point of fostering a "live and let live" arrangement between the Suffolk and other New England banks. On the contrary: the system promoted the active clearing and redemption of all bank notes, with close to \$400 million in redemptions overseen by the Suffolk bank in 1857 alone.

Bordo and Schwartz believe, however, that evidence from the Suffolk system "contradicts the theory of 'self-correcting-in-concert expansions.'" The evidence they refer to consists of figures for Suffolk system redemptions, which, Bordo and Schwartz observe, exhibit both cyclical behavior and a "clear upward trend."

Variations in total redemptions alone, however, neither contradict nor support the claims of free-banking theory. That theory implies, not that the volume of redemptions will be stable in any absolute sense, but that it will be a stable function of several other variables, the most important of which are the stock of bank reserves, real income, and the number of banks participating in the redemption arrangement (Selgin 1994a). A cursory glance at statistics representing these other variables suggests that much of the variation in Suffolk redemptions can be attributed to their movements. For example, both real (textile) output and specie holdings of New England banks doubled during the period in question. The number of New England banks also doubled.<sup>4</sup> Allowing for reserve economies of scale, these facts may account for the near quadrupling of Suffolk redemptions. The available statistics are, however, crude proxies only: more careful research will have to be undertaken before any reliable conclusions can be drawn concerning the effectiveness of the Suffolk system in constraining the aggregate stock of New England bank money. For the time being, the evidence remains inconclusive.

"Inconclusive" is also the verdict Bordo and Schwartz themselves reach with regard to evidence from Scotland and Canada. What they mean is that, although both arrangements appear to have been conducive toward overall monetary stability, it is not clear that the clearing mechanism was responsible for this stability. Perhaps, as in the case of New England, no sufficiently detailed statistical analysis of Scottish bank clearings exists to either confirm or refute the clearing-mecha-

<sup>4</sup>Banking statistics are from Root (1895); New England textile output figures are from Davis and Stettler (1966: 221).

nism hypothesis. Nevertheless, that hypothesis still provides *part* of the best available explanation for the stability of the Scottish and Canadian arrangements. Other explanations, including those offered by Bordo and Schwartz, are far less adequate: they fail either because they emphasize mechanisms common to many less successful banking systems (e.g., the constraint provided by the price-specie-flow mechanism) or because they emphasize mechanisms that were not truly characteristic of successful ones (e.g., unlimited liability, which was not a feature of the three largest Scottish banks).

I emphasize “part” in the last paragraph because it is by no means the case that the clearing mechanism is the only important source of stability in a free-banking system. Other features of past free-banking systems, such as the gold standard, unrestricted branch banking, competitive note issuance, and convertibility were also important, both because they contribute to the efficiency of the clearing mechanism and for other reasons. Although it is perfectly appropriate to observe, as Bordo and Schwartz occasionally do, the positive role played by these other features of past, successful banking systems, it is wrong to imply that this contribution is somehow at odds with the claims of free-banking theory.

## Competing Fiat-Type Monies

Free banking is an arrangement in which unregulated private banks issue notes and deposits that are generally redeemable on demand for some “outside” base money.<sup>5</sup> A tendency exists for all banks to redeem their notes in a common base money, such as gold coin; and in the absence of restrictions on branching like-denomination notes issued by different banks all tend to circulate at par:<sup>6</sup> in other words,

<sup>5</sup>In some instances, notes and deposits may also bear an “option clause” granting issuers the right to suspend payment under certain prespecified conditions.

It should be noted that the term “free banking” is also used to refer to banking systems organized in the antebellum United States under so-called free-banking laws. These systems were, however, far from being truly free from significant regulations: most prohibited branch banking, and all required that bank notes be backed by specific assets, typically state government bonds.

<sup>6</sup>See Selgin and White (1987). Bordo and Schwartz appear to accept Cooper’s (1989: 393–94) argument that government laws making particular bank notes publicly receivable would tend to undermine par-circulation of multiple private bank notes. I know of no case where this has occurred, and believe that both Canada and Sweden offer counterexamples. Of course, other kinds of government interference can and historically have undermined par-circulation of bank notes. U.S. laws against branch banking are a conspicuous example. But why construe this as an argument against free banking rather than as an argument against the laws in question?

various “brands” of bank currency trade at fixed rather than floating exchange rates.

A literature distinct from the literature on free banking imagines a very different arrangement in which competing private firms issue distinct, *irredeemable* fiat-type monies that trade at floating exchange rates, much like today’s government-issued fiat monies. According to Hayek (1978) and Klein (1974), competitive pressures would encourage firms to stabilize their monies’ purchasing power. Because private fiat-type monies are not claims to any “outside” reserve medium, their issuers do not have to hold any liquid reserve assets, and there is no need for a bank-money clearing mechanism. Overissuing institutions are disciplined, not by adverse clearings, but by a loss of market share to other, more conservative firms.

After briefly reviewing the theory of private fiat-type monies, Bordo and Schwartz rightly question whether competition among private fiat-type monies could be or ever has been observed in practice. They then generate confusion, however, by turning once again to review various historical episodes which, for the most part, have little bearing upon the theory being criticized: although the episodes Bordo and Schwartz refer to in this section of their paper all involve multiple note-issuing institutions, among them only the New England colonial episodes and Italy in the last half of the 19th century experimented with competing fiat monies. These experiments were, moreover, a far cry from *laissez faire* (Sannucci 1989). Most of the other episodes referred to (Scotland before 1845; Switzerland throughout most of the 19th century; Sweden before 1897; France from the revolution to 1806; mainland China before the 20th century; and Australia before 1910) are (approximate) instances of free banking, not competing fiat monies. Still other episodes, including the misnamed U.S. “free-banking” era, Japanese banking before 1882, and Hong Kong earlier this century, involved neither free banking nor competing fiat monies, and so are not particularly useful for assessing either theory. Indeed, it is rather misleading for Bordo and Schwartz to include them in what purports to be a survey of “commonly cited” examples of competing monies.<sup>7</sup>

Evidently most of the episodes reviewed do not provide any support for the competing fiat-monies theory of monetary self-regulation. But Bordo and Schwartz regard this fact as an argument against, not just the Klein-Hayek theory, but all theories of monetary self-regulation,

<sup>7</sup>Although Schuler (1992) includes all of these episodes in his survey of free-banking episodes, that survey covers all major instances of multiple note issuance, including episodes involving major regulatory restrictions.

including free-banking theory. Thus, in considering again the Scottish episode, Bordo and Schwartz observe, correctly, that it “clearly does not conform to the theory of flexible exchange rates among distinctive monies.” They then mistakenly characterize this feature of Scottish banking as one of several “deviations from a free-market system.” The truth is that a lack of floating exchange rates only represents a deviation from the competing fiat-monies theory of monetary self-regulation. It does not at all represent a deviation from free-banking theory, which actually predicts fixed exchange rates between various bank currencies within a single base-currency area.

What about Scotland’s other alleged deviations from *laissez faire*? Lawrence H. White (1991) addressed them at length, concluding in each case either that the allegations themselves are not true or that the alleged deviations do not contradict free-banking theory in any crucial way. Regrettably, Bordo and Schwartz seem to have overlooked this. One allegation White does not address is Checkland’s claim (1975: 186) that Scottish banks did not consistently offer to cash notes for the public on demand. Bordo and Schwartz argue that this practice, although it may (as Checkland himself claims) have lent stability to the Scottish system, was inconsistent with free-banking theory. But this is not so: the redemption of bank notes over the counter plays no crucial role in free-banking theory; my own analysis actually abstracts from such redemptions altogether, relying solely on interbank settlements as a source of restraint. Indeed, Checkland’s observation, if valid, only serves to undermine Bordo and Schwartz’s earlier claim that public redemptions of banknotes alone (and not the clearing mechanism) are able to restrain systemwide overexpansion.

At the end of their survey, Bordo and Schwartz again observe that the evidence does not “confirm the theory that self-regulation limits overissue.” But the question is not whether the theory is “confirmed” or not but whether it is the best theory available to account for the fact that some of history’s least-regulated banking systems have been exceptionally stable and crisis-free.<sup>8</sup> Of course much more research, and empirical research especially, is needed. Nevertheless, I believe that free-banking theory provides what is, up to now, the best available means for explaining a historical record that blatantly contradicts conventional beliefs concerning the inherent instability of unregulated banking.

<sup>8</sup>In Selgin (1994a) I argue, using evidence gathered largely by Bordo and Schwartz themselves, that the freest banking systems have also been among those suffering the fewest banking crises.

## The Bordo-Schwartz Alternative

After declaring arguments and evidence for the stability of free banking insufficient, Bordo and Schwartz suggest an alternative scheme for bank self-regulation. Underlying the scheme are three claims concerning requirements for stability:

1. Price stability (meaning a stable index of consumer prices) is essential to stable banking;
2. Any bank that exhausts its capital and reserves should be immediately closed or reorganized; and
3. All risk of loss should be borne by bank owners and managers rather than by bank depositors, note holders, and other creditors.

To satisfy the first requirement, Bordo and Schwartz favor a monetary-base rule. To satisfy the second, they recommend market-value accounting, and the elimination of subsidies to failed banks. To satisfy the third, they recommend that banks be subjected to statutory capital requirements and double liability, among other things.

In evaluating Bordo and Schwartz's scheme as an alternative to free banking, it is first necessary to consider the extent to which it actually differs from free banking. Consider first the goal of price stability. Most historical free-banking systems were based upon a gold standard; and, as Bordo himself (1984) has observed, while the gold standard appears to have allowed considerable short-run price movements, it nonetheless produced much greater long-run price stability than any modern fiat standard.

Bordo and Schwartz believe, however, that, regardless of its price-stabilizing capabilities, a gold standard "is highly unlikely." They therefore propose that price stability should be achieved by way of some "formula for central banks to follow in creating outside [base] money." Their favorite formula appears to be Milton Friedman's frozen monetary-base rule, which places a complete moratorium on central-bank lending and open-market operations. Bordo and Schwartz see this rule as an alternative to free banking because, in their view, proponents of free banking including myself "favor gold convertibility as the complement to complete deregulation of inside [i.e., bank-issued] money."

In fact, I recommended a free-banking reform based on a frozen stock of fiat money several years ago (Selgin 1988: chap. 11). More recently I discussed the implications of free-banking arrangements based on other rule-bound fiat regimes (1994b). The Bordo-Schwartz monetary-base rule "alternative" to free banking is therefore no alternative at all but rather a component of at least one proposed free-

banking reform. That much of the free-banking literature assumes a commodity standard—rather than a fiat-base money—reflects, not necessarily a normative preference, but this literature’s attempt to shed light on past free-banking episodes that were in fact based on commodity standards.

Next consider Bordo and Schwartz’s second requirement, that banks exhausting their reserves and capital should be closed immediately. This requirement also seems perfectly consistent with free banking: after all, government regulations rather than market forces have been the source of that “forbearance” that permits bankrupt financial institutions to go on functioning as if they were still solvent.<sup>9</sup>

Bordo and Schwartz’s third requirement—that only bank owners and managers and not deposit and noteholders or taxpayers should bear any risk of loss in connection with bank failures—does represent a genuine departure from free banking. To be sure, bank owners and managers of banks would occasionally suffer losses under free banking, while taxpayers as such would not. But deposit and noteholders also might suffer losses, as was the case in several historical instances of free banking. Free banking therefore does not satisfy Bordo and Schwartz’s third, alleged requirement for stability.

Which, I believe, is a good thing, because the requirement in question is fundamentally misguided. Its satisfaction would entail removal of any tendency for consumers to monitor and discipline ill-managed banks: a consumer who bears no risk of loss from bank failures is a consumer who has no reason to care whether his or her bank is likely to fail or not. Such a consumer will be inclined to patronize banks that make risky investments promising high returns. Bankers in turn would then have no choice but to heed the wishes of risk-immune consumers or lose their business entirely. This, I should think, was the hard lesson taught by recent experience with government deposit insurance: a banking system whose creditors bear no risk is likely to become a risky banking system.

Indeed, the principle that “creditors should suffer no losses” is so misguided that no one has ever even thought of applying it to any

<sup>9</sup>Bordo and Schwartz admit that market forces alone may have posed an adequate restraint upon bank mismanagement in Scotland before 1845. However, they “are skeptical that [similar market forces alone would offer] adequate protection currently for noteholders and depositors, in an era of global banks engaged in novel activities, given the incomplete information about today’s complex world available to economic agents.” Granting that the world today is more “complex” than it used to be (whatever that means), and that information concerning it is “incomplete,” I still fail to see how this adds up to an argument for regulation. If it does, then it is no less an argument for regulating all sorts of international economic activities.

business other than banking. Why should banking be different? The reason typically given is that unregulated banks, unlike other firms, are subject to runs triggered by depositors' and noteholders' desire to avoid failure-related losses: redemption requests are serviced on a "first-come-first-served" basis, so that panic-stricken liability holders have a better chance of recovering their savings if they get to their banks right away. Runs on isolated banks might not be a problem. However, it is widely believed—and Bordo and Schwartz appear to accept the belief—that bank runs become "contagious," spreading from bank to bank, attacking (pre-run) solvent firms as well as insolvent ones, and threatening a collapse of the entire payments system. Such contagious bank runs constitute an "external effect," implying market failure and the need for extraordinary regulatory measures.

Empirical evidence supporting the contagious bank-run hypothesis is, however, quite limited (Kaufman 1994). The evidence is, moreover, particularly scanty for relatively free banking systems (Selgin 1994a). The view that bank runs are contagious appears, in other words, to be more an article of faith among proponents of bank regulation than an impression confirmed by experience.

One final, critical comment on the Bordo-Schwartz proposal seems in order. Unlike free banking, their proposal involves a government-sponsored regulatory agency.<sup>10</sup> The risk exists that any such agency will be subject to political pressures, including pressure from special interests within the banking industry that may ultimately capture the agency. Thus, while it may be naive for proponents of free banking to pretend that complete deregulation and the adoption of a gold (or, for that matter, frozen-fiat) standard is possible, it seems at least equally naive for proponents of regulation to assume that politically based regulatory agencies can be relied upon to cater to consumers' long-run interests.

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<sup>10</sup>Bordo and Schwartz insist that the agency "could be administered as a private undertaking." But by this they presumably mean merely that it could be self-funding and privately owned. Presumably they do not mean that it would function on a strictly voluntary basis: all banks would have to conform to its regulations, and could be forced to close at its command. To describe such an agency as "nongovernmental" is, of course, highly misleading: according to the above definition, many central banks, including the Federal Reserve System, are "private." They are also indisputably "governmental."

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